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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

5

Complete if Known

Application Number

Filing Date

10-29-2001

First Named Inventor

Yingjian Wang

Art Unit

Examiner Name

Attorney Docket Number

U.S. PATENT DOCUMENTS

| Examiner Initials | Cite No. 1 | Document Number Number - Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|----------------------|---------------|---|--------------------------------|--|---|
| | | US- | | | |
| | | US- 5,143,854 | 09-01-1992 | Pirrung, et al. | |
| | | US- Described method of making ordered arrays of nucleic acid sequences. | | | |
| | | US- | | | |
| | | US- 5,283,173 | 02-01-1994 | Fields and Song | |
| | | US- Described an in vivo genetic method (yeast two-hybrid screening) | | | |
| | | US- to study protein-protein interactions. | | | |
| | | US- | | | |
| | | US- 5,807,522 | 09-15-1998 | Brown, et al. | |
| | | US- Disclosed a method and apparatus for forming microarrays of | | | |
| | | US- biological samples and for distribution of biological reagents to researchers | | | |
| | | US- through DNA array. The method involves dispensing a known volume of a | | | |
| | | US- reagent at each selected array position, by tapping a capillary dispenser on | | | |
| | | US- the support under conditions effective to draw a defined volume of liquid | | | |
| | | US- onto the support. | | | |
| | | US- | | | |
| | | US- | | | |

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Date Considered

12/16/04

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¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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| Substitute for form 1448B/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | |
| | | Filing Date | 10-29-2001 |
| | | First Named Inventor | Yingjian Wang |
| | | Group Art Unit | |
| | | Examiner Name | |
| Sheet 2 of 5 | Attorney Docket Number | | |

| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | | |
|---|-----------------------|---|----------------|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and the country where published. | T ² |
| AL | | BIGGIN, M.D. (1999) Ultraviolet-cross-linking assay to measure sequence-specific DNA binding in vivo. <i>Methods Enzymol.</i> 304, 496-515. Described the applications of Cross-linking, including in studying protein-protein interactions, protein-DNA interactions. | |
| AL | | BULYK ML, GENTALEN E, LOCKHART DJ, CHURCH GM (1999) Quantifying DNA-protein interactions by double-stranded DNA arrays. <i>Nature Biotechnology</i> , 17:573-577. Described methods of using arrays of nucleic acids to detect DNA-protein interactions. | |
| AL | | DERISI J, PENLAND L, BROWN PO, BITTNER ML, MELTZER PS, RAY M, CHEN Y, SU YA, TRENT JM (1996) Use of a cDNA microarray to analyse gene expression patterns in human cancer. <i>Nature Genetics</i> 14:457-460. Described methods of using arrays of nucleic acids for large scale hybridization assays, including monitoring of gene expression | |
| AL | | FIELDS AND SONG, A novel genetic system to detect protein-protein interactions... 1989, <i>Nature</i> , 340:245-246. Describe a new method of Yeast two-hybrid screening for detecting protein-protein interactions. | |

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| Substitute for form 14499/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td style="width: 50%;"></td> </tr> <tr> <td>Filing Date</td> <td>10-29-2001</td> </tr> <tr> <td>First Named Inventor</td> <td>Yingjian Wang</td> </tr> <tr> <td>Group Art Unit</td> <td></td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Attorney Docket Number</td> <td></td> </tr> </table> | | Application Number | | Filing Date | 10-29-2001 | First Named Inventor | Yingjian Wang | Group Art Unit | | Examiner Name | | Attorney Docket Number | |
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| Sheet | 3 | of | 5 | | | | | | | | | | | | |

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| Examiner Initials* | Cite No.† | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published. |
| | | FODOR SP, READ JL, PIRRUNG MC, STRYER L, LU AT, SOLAS D. (1991) Light-directed, spatially addressable parallel chemical synthesis. <i>Science</i> , 251: 767-773. Described an alternate method of creating ordered arrays of nucleic acid sequences. The method involves synthesizing different nucleic acid sequences at different discrete regions of a support, usually made of glass. |
| | | GE, H. (2000) UPA, a universal protein array system for quantitative detection of protein-protein, protein-DNA, protein-RNA and protein-ligand interactions. <i>Nucleic Acids Research</i> , Vol. 28:e3. Describe the protein arrays and some of the applications. |
| | | HACIA--JG (1999) Resequencing and mutational analysis using oligonucleotide microarrays. <i>Nat Genet</i> . 21(1 Suppl):42-7. Described methods of using DNA arrays to get nucleotide sequence information, including mutation detection, polymorphism detection and DNA sequencing |
| | | KONONEN J, BUBENDORF L, KALLIONIEMI A, BARLUND M, SCHRAML P, LEIGHTON S, TORHORST J, MIHATSCH MJ, SAUTER G, KALLIONIEMI OP (1998) Tissue microarrays for high-throughput molecular profiling of tumor specimens. <i>Nature Medicine</i> , 4:844-7. Described methods of using of tissue arrays in tumor screening. |

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| AL | | PHIZICKY AND FIELDS, Protein-protein interactions: methods for detection and analysis. Microbiological Reviews, p94-123, Mar. 1995 Reviewed several methods for detecting protein-protein interactions. |
| AL | | PRUSS, GAVIN, MELNIK AND BAVYKIN. DNA-protein cross-linking applications for chromatin studies in vitro and in vivo. Methods Enzymol.; 304, 516-533, 1999) Described the applications of Cross-linking, including in studying protein-protein interactions, protein-DNA interactions. |
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| AL | | SCHEMA M, SHALON D, DAVIS RW, BROWN PO (1995) Quantitative monitoring of gene expression patterns with a complementary DNA microarray. Science 270:467-470. Described methods of using arrays of nucleic acids for the monitoring of gene expressions. |
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| OE | | SOUTHERN EM, MASKOS-U, ELDER JK -- (1992) - Analyzing and comparing nucleic acid sequences by hybridization to arrays of oligonucleotides: evaluation using experimental models. <i>Genomics</i> 13:1008-1017. Described a related method to create arrays of nucleic acids by parallel synthesis. |
| OE | | WANG, Y., WU, T.R., CAI, S., WELTE, T., AND CHIN, Y.E. (2000) Stat1 as a component of tumor necrosis factor alpha receptor 1-TRADD signaling complex to inhibit NF-kappaB activation. <i>Mol. Cell Biol.</i> 20(13), 4505-12. Describe the use of antibody arrays in screening protein-protein interactions. |
| OE | | WONG, SHAN S. (1993) Chemistry of protein conjugation and cross-linking. Boca Raton: CRC Press. Describe a variety of cross-linkers and a variety of methods to cross-link proteins. |

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| Examiner Signature | <i>Ch. J. Lee</i> | Date Considered | 12/16/04 |
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